AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-18. (Canceled)

19. (Currently Amended) Aircraft having a cooling device for expelling heat from a heat source located in the interior of said aircraft to a heat sink, comprising:

a piping system sealed against the surrounding atmosphere, the piping system having a heat intake section thermally coupled with the heat source and a heat output section thermally coupled with the heat sink, and an essentially adiabatic conveyance section located therebetween, whereby the piping system is filled with a heat conveyance medium which, when heat is received in the heat intake section from the heat source, undergoes a transition from the liquid phase to the gaseous phase, then flows into the heat output section, then condenses when discharging heat to the sink, and then flows back to the heat intake section, wherein said heat sink includes a section of an external wall of the aircraft;

at least one heat exchanger which operatively couples the piping system to ~~one~~ ~~of~~ the heat source and ~~the heat sink~~, thereby to cause heat transfer in ~~at least one of~~ the heat intake section ~~and the heat output section, respectively~~;

a ventilator operatively connected to said at least one heat exchanger, the ventilator adapted to control the transfer of heat between said at least one heat exchanger and ~~said one of~~ the heat source ~~and the heat sink~~;

a temperature sensor located adjacent the heat source so as to detect the temperature thereof, the temperature sensor operatively connected to the cooling device so that the cooling device can respond to the temperature detected by the temperature sensor;

a regulator valve operatively connected to the piping system, thereby to control the quantity of heat conveyance medium flowing to or from the heat exchanger; and

a regulation device operatively connected to the ventilator and to the regulator valve so as to control the ventilator and the regulator valve according to the temperature detected by the temperature sensor.

20. (Previously Presented) Aircraft in accordance with claim 19,

whereby the piping system includes a closed pipe, one end section thereof being the heat intake section and the other end section thereof being the heat output section, and

whereby both end sections thereof are connected to one another via the conveyance section.

21. (Previously Presented) Aircraft in accordance with claim 19,

whereby the heat source includes at least one of the following components: an electronic device in the aircraft, an on-board kitchen in the aircraft, and a surface requiring cooling in the aircraft.

22. (Previously Presented) Aircraft in accordance with claim 19 further comprising:

means for controlling the flow of the heat conveyance medium between the heat intake section and the heat output section.

23. (Canceled).

24. (Canceled).

25. (Previously Presented) Aircraft in accordance with claim 19,

whereby at least one of the ventilator and the regulator valve is operatively connected to the temperature sensor and controlled in accordance with the temperature detected by the temperature sensor.

26. (Canceled).

27. (Previously Presented) Aircraft in accordance with claim 19, further comprising:

a cold storage unit (266) provided between the heat source and the heat sink.

28. (Previously Presented) Aircraft in accordance with claim 19, further comprising:

a cold storage unit provided in the heat source.

29. (Previously Presented) Aircraft in accordance with claim 19,

whereby the piping system forms a closed circuit which connects the heat source and the heat sink via a feed line and a discharge line, respectively.

30. (Previously Presented) Aircraft in accordance with claim 27,

whereby the cold storage unit is located in a special circuit with a special piping system.

31. (Currently Amended) Aircraft in accordance with claim 27,

whereby when the aircraft is in rest condition, the heat sink is located geodetically higher than the cold storage unit, which is further located geodetically higher than [[and]] the heat source.

32. (Currently Amended) Method for the discharge of heat from a heat source located in the interior of an aircraft to a heat sink, the aircraft including a closed piping system sealed against the surrounding atmosphere, the piping system having a heat intake section thermally coupled to the heat source and a heat output section thermally coupled to the heat sink, and an essentially adiabatic transport section located therebetween, the piping system being filled with a heat conveyance medium which, when heat is taken from the heat source in the heat intake section, undergoes a transition from the liquid phase to the gaseous phase, then flows into the heat output section, then condenses as heat is discharged to the heat sink again and then flows back into the heat intake section, wherein the heat sink includes a section of an external wall of the aircraft, comprising:

causing, via at least one heat exchanger which operatively couples the piping system to ~~one of~~ the heat source ~~and the heat sink~~, heat transfer in ~~one of~~ the heat intake section ~~and the heat output section, respectively~~; and

controlling, via a ventilator, the heat transfer between the [[said]] at least one heat exchanger and ~~said one of~~ the heat source ~~and the heat sink~~.